INTELLIGENT DEVICE HAVING BACKGROUND CACHING OF WEB PAGES WITHIN A DIGITAL TELEVISION SYSTEM AND METHOD OF SAME

ABSTRACT OF THE INVENTION

A client-side intelligent device having background caching of web pages within a digital television (DTV) system and method of same. The present invention includes a digital television system having an intelligent device for interfacing with a user/viewer and controlling the display of information on a display screen. The intelligent device, in one embodiment, is a set-top-box, but could be any intelligent electronic device or computer system. The set-top-box is configured to receive a DTV signal (e.g., land based cable or digital satellite system) that includes audio/visual information as well as data signals in a datacast format. The datacast format includes web pages, e.g., in the HTML (hypertext markup language) format of the world wide web. The DTV broadcasters support multiple channels of information on which content providers can supply a domain of web pages on a periodic basis. The present invention is able to display viewer-selected web pages on the DTV system. An intelligent filter is used that modifies itself based on user behavior and user preferences in terms of the web pages that a viewer routinely visits. The intelligent filter is then used to identify certain web pages of the pages that are being broadcast and these identified web pages are stored in a cache memory for later use by the viewer. A second tuner can be used to poll multiple channels when updating the cached contents. Cached web pages avoid broadcast latencies (due to periodic updating) and thereby are displayed faster to the viewer.